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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,393	07/11/2003	Noriyuki Kohara	2003_0931A	3317

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EXAMINER

GRAY, JILL M

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 09/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/617,393	Applicant(s) KOHARA ET AL.	
	Examiner Jill M. Gray	Art Unit 1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

More specifically, the language of "fiber having a crosslinking structure" is indefinite because it is unclear if the fiber is crosslinked or capable of being crosslinked.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Nishida et al., European Patent Publication EP 0 783,048 A2, and 5,897,673, referred to collectively as Nishida.

Nishida teaches a crosslinked fiber having polar groups bound thereto and fine metallic particles dispersed within the fiber. The polar groups can be carboxyl groups and at least part of said groups are present as a salt of an alkali metal, an alkali earth metal or ammonia, and 60 mole% or more of said carboxyl groups are neutralized with the salt of an alkali metal, an alkali earth metal or ammonia, as required by claims 1, 2 and 7. See EP '048, abstract, page 4, lines 9, 15 and lines 28-35; '673, abstract, column 4, lines 1, 6, 42, and lines 62-65. The metal and/or metal compound is the same as those contemplated by applicants in claim 3 and the content of said metal or

metal compound is within the range set forth by applicants in claim 4. See EP '048, page 5, lines 18-25 and Example 1; '673, column 6, lines 14-30 and Example 1.

Moreover, the fiber can be crosslinked acrylic fiber wherein at least part of the functional groups of said fiber have been hydrolyzed and at least part of the hydrolyzed functional groups are present as a carboxylate salt, wherein 60 mole% or more of the carboxyl groups are neutralized with the salt of an alkali metal, an alkali earth metal or ammonia as required by claims 5 and 6. See EP '048, page 4, lines 40-44 and Example 1; '673, column 5, lines 11-20 and Example 1.

Therefore, the prior art teachings of Nishida anticipate the invention as claimed in present claims 1-7.

Claims 1, 3, and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Patent abstract 55-137210 (the abstract).

The abstract teaches acrylic fibers having carboxyl groups bound thereto, wherein at least part of the carboxyl groups are present as a copper salt and fine particles of a copper compound substantially insoluble in water are dispersed in said fiber, essentially as claimed in claims 1, 3 and 7.

Accordingly, the teachings in the abstract anticipate the invention as claimed in present claims 1, 3 and 7.

Applicants have not clearly identified that which they regard as their invention. The prior art clearly teaches that crosslinked fibers having carboxyl groups bound thereto, at least part of said carboxyl groups being present as a salt of an alkali metal

and having fine particles of a metal or metal compound dispersed in said fiber are known.

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill M. Gray whose telephone number is 571-272-1524. The examiner can normally be reached on M-F 10:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jill M. Gray
Examiner
Art Unit 1774

jmg